

KT7DCL - B38 - 022 - 1 R 00 - A 1 - 00 - *

1
P1
P2
3
4
5
6
7
8
9

① Series

② Cam ring for " P1 "

Volumetric displacement (cm³/rev)

B14=43.9	B35=113.4
B17=55.0	B38=120.6
B20=66.0	B42=137.5
B24=81.1	B45=145.7
B28=89.9	B50=157.9
B31=99.1	

Cam ring for " P2 "

Volumetric displacement (cm³/rev)

003=10.8	017=58.3
005=17.2	020=63.8
006=21.3	022=70.3
008=26.4	025=79.3
010=34.1	028=88.8
012=37.1	031=100.0
014=46.0	

③ Type of shaft

- 1 = Keyed (SAE C)
- 2 = Keyed (NO SAE)
- 3 = Splined (SAE C)
- 4 = Splined (NO SAE)
- 5 = Keyed (NO SAE)

④ Direction of rotation
(view on shaft end)

- R = clockwise
- L = counter - clockwise

⑤ Porting combination

00 = standard

⑥ Design letter

⑦ Seal class

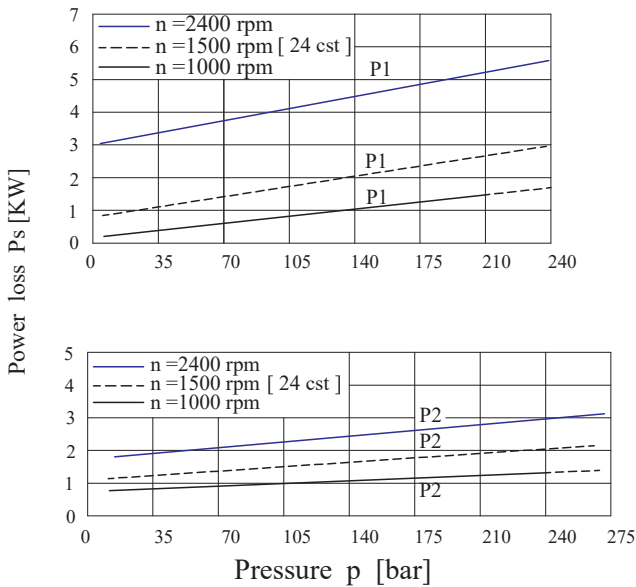
- 1 = S1 (for mineral oil)
- 4 = S4 (for the resistant fluids)
- 5 = S5 (for mineral oil and fire resistant fluids)

⑧ Mounting W / connection variables

P1=1 1/4" S=3" P2=1"	
UNC	METRIC
00	M0

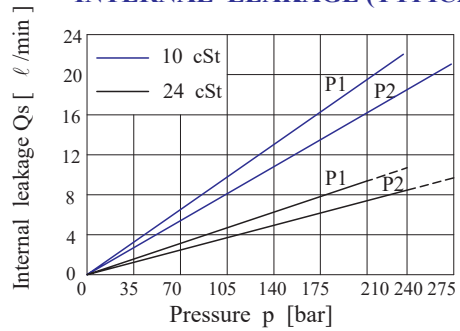
⑨ Modifications

HYDROMECHANICAL POWER LOSS (TYPICAL)



Total hydromechanical power loss is the sum of each section at its operating conditions.

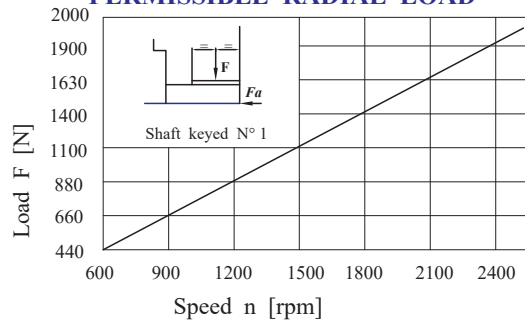
INTERNAL LEAKAGE (TYPICAL)



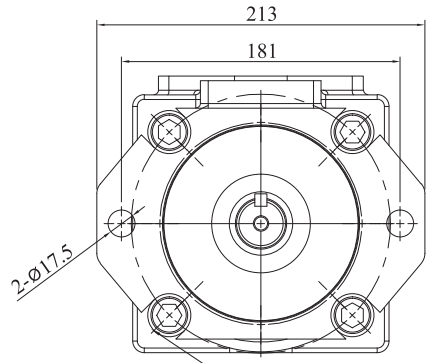
Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage

Total leakage is the sum of each section loss at its operating conditions.

PERMISSIBLE RADIAL LOAD

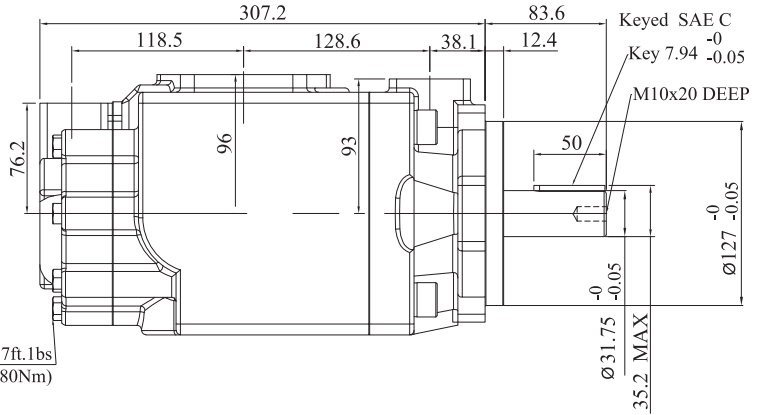


Maximum permissible axial load Fa = 1200 N



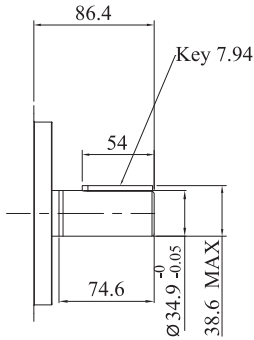
MOUNTING TORQUE 138ft.lbs
(187Nm)

MOUNTING TORQUE 57ft.lbs
(80Nm)



Shaft Code 1

Keyed SAE C
Key 7.94 -0.05
M10x20 DEEP
 $\text{Ø}127 -0.05$
 $\text{Ø}31.75 -0.05$
35.2 MAX



Shaft Code 5
NO SAE

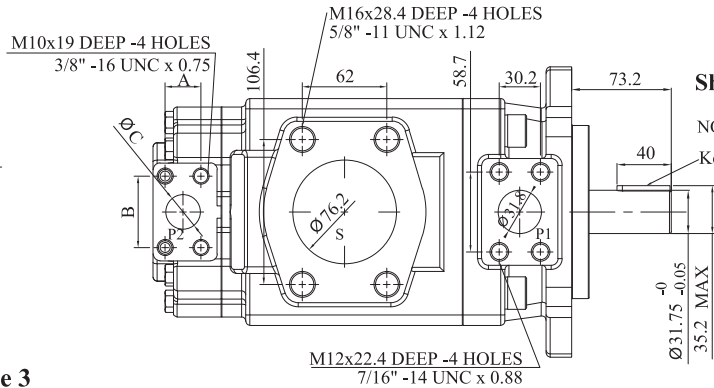
	Alternate connect. variables	
	00 & M0	01 & M1
A	1.031 (26.2)	0.874 (22.2)
B	2.06 (52.4)	1.874 (47.6)
C	1.0 (25.4)	0.75 (19.05)

Shaft code 4

NO SAE splined shaft
Class 1 - J498 b
12/24 dp. -14 teeth
30° pressure angle
Flat root side fit.

Shaft code 3

SAE C splined shaft
Class 1-J498 b
12/24 dp.-14 teeth
30° pressure angle
Flat root side fit



Shaft Code 2

NO SAE
Key 7.94 -0.05
 $\text{Ø}31.75 -0.05$
35.2 MAX

Shaft torque limits (mℓ/rev × bar)				
Pump	Shaft	Vp x p max.P1+P2	Shaft	Vp x p max.P1+P2
KT7DCL	1	43240	4	61200
	2	34590	5	45200
	3	61200		

OPERATING CHARACTERISTICS - TYPICAL (24 cST) (input power p (kw) for one cartridge only)

Pressure Port	Series	Volumetric Displacement Vp cm ³ /rev	Flow q & n=1800rpm (ℓ/min)			Input power p & n=1800rpm (KW)			P Max Kg/cm ²	Max r.p.m
			P=0 bar	P=140 bar	P=250 bar	P=7 bar	P=140 bar	P=250 bar		
P1	B14	43.9	79.1	72.5	67.3	2.6	20.6	35.0	250	2500
	B17	55.0	98.8	92.3	87.0	2.8	25.3	43.0		
	B20	66.0	118.6	112.0	106.8	3.0	29.8	50.9		
	B24	81.1	145.8	139.2	134.0	3.4	36.1	61.9		
	B28	89.9	161.8	155.2	150.0	3.5	39.1	68.3		
	B31	99.1	178.3	171.7	166.5	3.7	43.6	75.0		
	B35	113.4	203.9	197.2	192.0	4.0	49.4	85.3		
	B38	120.6	216.8	210.2	204.9	4.2	52.4	90.5		
	B42	137.5	247.2	240.6	235.4	4.5	59.4	102.7		
	B45	145.7	261.9	253.6	246.8	5.0	62.4	108.7		
B50	157.9	284.1	275.8	271.3 1)	5.3	67.5	100.3 1)	210	2200	
P2	Series	cm ³ /rev	P=0 bar	P=140 bar	P=300 bar	P=7 bar	P=140 bar	P=300 bar	275	2500
	003	10.8	19.6	14.6	—	1.57	6.30	—		
	005	17.2	30.9	26.0	16.44	1.70	8.94	17.88		
	006	21.3	38.3	33.4	21.6	1.78	10.64	21.6		
	008	26.4	47.4	42.6	30.72	1.89	12.75	26.16		
	010	34.1	61.3	56.4	44.64	2.06	15.94	33.0		
	012	37.1	66.7	61.8	50.04	2.11	17.18	35.4		
	014	46.0	82.7	77.8	66.0	2.30	20.87	43.8		
	017	58.3	104.8	99.9	88.2	2.55	25.95	54.84		
	020	63.8	114.7	109.8	98.04	2.66	28.23	59.76		
	022	70.3	126.4	121.5	109.8 2)	2.80	30.92	60.36 2)		
	025	79.3	142.5	137.6	—	2.99	34.64	—		
	028	88.8	159.6	154.7	—	3.18	38.58	—		
	031	100.0	179.7	174.9	—	3.41	43.21	—		

1) B50=210 bar max. int.

2) 022=240 bar max. int.

Min Speed : 600 rpm